Appl. No. 10/631,957 Amdt. dated January 3, 2005

Reply to Office Action of September 2, 2005

Amendments to the Specification:

Please replace paragraph [0014] with the following amended paragraph:

[0014] It is a further object of the invention [[is]] to provide an apparatus for separating a mixed particulate material into particles of at least two different specific gravities or ranges of specific gravity.

Please replace paragraph [0019] with the following amended paragraph:

The above-described disadvantages objects are realized by the present invention [0019] which relates to an apparatus for separating mixed particulate material into particles of at least two different specific gravities or ranges of specific gravity. In a preferred embodiment, the apparatus comprises an air compressor for providing compressed air into the discharge tube, which, through the venturi effect, creates a vacuum in a connecting hose. The connecting hose is connected to the top of a separation chamber wherein the mixed particulate material, which is vacuumed in by a vacuum hose, is separated and the heavier materials (higher specific gravity) fall into a hopper, while the light backstop material (lower specific gravity) is discharged from the discharge tube by virtue of the vacuum. In addition, the apparatus also comprises an air adjustment valve, automatic unloader valve, stand and discharge tube adjuster. In other embodiments of the invention, conveyor systems can be used to collect either or both the lower and higher specific gravity materials, and bring them to other more convenient locations. A number of different sensors can be added to the automatic unloader valve to determine when a pre-determined amount of higher specific gravity material has been collected. The entire operation of the apparatus can be controlled by a computer, which can also be connected through a network to other computers whereby the apparatus for separating materials can be operated remotely.